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DISCLOSURES UNDER CONSIDERATION

Philip Morris Incorporated
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28 September 1979

Code 1 - Offensive/Urgent
Code 2 - Defensive/Urgent
Code 3 - Offensive/Normal
Code 4 - Defensive/Normal

785 IMPROVED DILUTION UNIFORMITY OF VENTED FILTER TIP CIGARETTES

L. Meyer and W. Houck, Jr./R&D/New Cigarette Products Division/Meyer/Gannon

Wrapless acetate filter plugs are proposed for both vented and unvented filter cigarettes. For the unvented filters, the advantage is simplification and elimination of problems with the wrap, hence increased efficiency of production. For ventilated filters, more uniform dilution and a requirement of fewer vent holes in the tipping paper are seen.

Sarofeen

CODE 1

8-16-77 Disclosure received.

2-78 Inventor Houck conducting tests to develop patent data.

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786 FILTER MATERIAL

G. Keritsis/R&D/Tobacco Materials Development Division/Meyer/Gannon

Porous or foam filter rod is extruded from defatted protein. Alternatively, protein fiber tow can be extruded.

Inskeep

CODE 2

8-18-77 Disclosure received.

6-78 PM data base search completed.

Inventor has no examples at this time.

7-5-79 Inactivated

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0000049569

787 USE OF PHENOLIC GLYCOSIDES AS FLAVORANTS IN TOBACCO

E. Sanders/R&D/Chemical Research Division/Johnson/Osdene

Phenolic glycosides useful as flavorants in smoking materials are disclosed. on pyrolysis, the phenol flavorant is released to flavor the smoke. Advantageous in that the compounds are odorless and reduce pack aroma.

D&O/Hutcheson

CODE 3

- 7-21-77 Disclosure received.
- 9-19-78 Disclosure to D&O for evaluation.
- 10-78 Search received from D&O.
- 3-79 Further development work being done by inventor.
- 9-79 Synthetic routes are being developed according to the inventor.

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794 MICROWAVE/GAS CHROMATOGRAPHY

D. Watson/R&D/Analytical Division/Will/Osdene

Microwave spectroscopy for selective detection of components eluting from a gas chromatograph.

Related to 795

Sarofeen

CODE 3

- 10-24-77 Disclosure received.
- 2-78 Search sent to inventor for review.
- 12-78 Inventor has asked that this case not be prosecuted pending his further investigations of the method, possibly should be inactivated.
- 3-79 Inventor preparing new disclosure.

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0000049570

795 MICROWAVE/GAS CHROMATOGRAPHY

D. Watson/R&D/Analytical Division/Will/Osdene

Microwave energy source selectively vaporized components for further separation by GC.

Related to 794

Sarofeen

CODE 3

10-24-77 Disclosure received.

2-78 Search sent to inventor for review.

12-78 Inventor has asked that this case not be prosecuted pending his further investigations of the method, possibly should be inactivated.

3-79 Inventor preparing new disclosure.

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796 BIOSYNTHESIS OF A TOBACCO FLAVORANT OR TOBACCO SMOOTHER--
FERMENTED TOBACCO

B. Semp, D. Teng, and S. Tenhet/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Biosynthesis of tobacco fermentation flavorants by microorganisms. Advantages include use on unfermented tobacco and low delivery cigarettes. In addition, it is more rapid than conventional tobacco fermentation procedures.

Hutcheson

CODE 1

10-28-77 Disclosure received.

8-78 Preliminary search completed on PM data base.

3-79 Experimental work underway.

9-6-79 Additional art found on "accelerated fermentation" and forwarded to inventors. Similar concepts disclosed in US 516778 and 1262622.

9-10-79 Memo to inventors reviewing prior art.

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0000049571

800 COLOR AND ODOR REMOVAL FROM UNCURED TOBACCO

B. Semp and D. Teng/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Green tobacco is treated with a lipase enzyme to remove lipids. The green odor is eliminated and smoking quality improved.

Hutcheson

CODE 2

11-10-77 Disclosure received.

8-78 Preliminary search completed on PM data base.

3-79 Experimental work completed.

9-11-79 Search requested from outside firm.

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816 COPOLYMER POSSESSING WATER AND/OR ETHANOL SOLUBILITY FOR MAKING SMOKING COMPOSITIONS

W. Johnson, Jr. and H. Grubbs/R&D/Chemical Research Division/Johnson/Osdene

Monomers of flavor-release polymers are mixed with monomers containing polar groups and copolymerized to give a copolymer which possesses water and/or ethanol solubility. Typically the copolymerizations are carried out in bulk using free radical catalysts. Smoking compositions are treated with the polymers by spraying or by incorporating in reconstituted tobacco.

Hutcheson

3-2-78 Disclosure received.

8-78 Discussed with inventors.

3-79 Awaiting completion of example work and smoking data.

8-79 Inventors indicate experimental work is proceeding and subjective evaluation should be completed by the end of the year.

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0000049572

818 CONVENTIONAL DILUTION CIGARETTE CONTAINING SINGLE OR SEVERAL ROWS OF VENTS PLACED TOGETHER ON NARROW SYMMETRICAL BAND

A. Kassman and W. Geiszler, Jr./R&D/New Cigarette Products Division/Gannon/Meyer/Physical Research Division/Kassman/Lowitz/Farone

Benefits are derived from locating the vent rows on a nonsymmetric pattern along the filter. Under certain advantageous design conditions relating to the RTD of the rod and filter and the amount of dilution, the position of the vent rows can be especially selected to allow maximum flexibility in setting the cigarette RTD without simultaneously affecting the dilution or the tar delivery.

Inskip

CODE 1

3-8-78 Disclosure received.
Awaiting more information.
1-9-79 Brief review with inventors.
4-25-79 Peculiar results, test being redone; then ready to go.
7-23-79 Revised data received.

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827 PRESSED GREEN BRIGHT TOBACCO LEAVES

G. Bokelman/R&D/Tobacco Materials Development Division/Burns/Gannon

Fresh green tobacco leaves are placed between 2 belts and run between 2 metal rollers. The expressed juices are collected for further processing before being reapplied to the pressed leaves. The stems are completely flattened by this process but are not shredded. Advantages: (1) the protoplasmic juices are removed from green tobacco leaves without homogenization; (2) this process provides great flexibility for controlling the chemical composition of the tobacco; (3) the expressed juices can be processed to selectively remove soluble protein, potassium nitrate, phenols, chlorophyll, nicotine, strach, free amino acids, etc. as by-products; (4) the tobacco will not need to be threshed; (5) although tobacco treated by this process will be subjected to an artificial curing step, it will have form, color, and handling characteristics similar to conventionally cured tobaccos; (6) this process offers a potential energy savings in the removal of water from green tobacco; (7) the pressed leaves, after recombination with processed expressed juices, can be fermented in order to develop unique subjective characteristics, etc.; (8) the expressed juices, either with or without processing, can be used as a medium for fermentation to produce tobacco flavor components.

Hutcheson

CODE 2

4-17-78 Disclosure received.
7-21-78 Preliminary search completed on PM data base and results reported to inventor.
3-79 Completion report being prepared by inventor.
9-79 Waiting for completion report and experimental data contained therein--should be ready by 9-15-79.
9-11-79 Search requested by outside firm.

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829 ON-LINE QUANTITATION OF PLASTICIZER IN FILTER RODS

D. Watson and W. Harvey/R&D/Analytical Division/Will/Osdene

The device would provide for measurement of absorbed energy at selected microwave frequencies as this energy is directed through the filter rods on a maker. These measurements, once calibrated against plasticizer content of the filter material, would be used through a feed-back circuit to control the amount of plasticizer added.

Related to 877.

Sarofeen

4-24-78 Disclosure received.

8-18-78 This device functions similarly to very close art in-house and in a prior art reference. Under advisement pending further development.

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834 IMPROVED FLAVOR FOR RECONSTITUTED TOBACCO

D. Keel/R&D/Flavor Development Division/Daylor/Gannon

In the manufacture of reconstituted tobacco by the paper-made process, in which the solubles are concentrated and returned to the sheet, it was found that heating the concentrated solubles with or without additives to a temperature of about 175 degrees F for a period of about 30 to 60 minutes or less before recombination with the sheet resulted in an improved flavor of the product making it more tobacco-like. This pasteurization process results in a darker colored sheet, more desirable flavor, and prevents souring or solidifying of the concentrated solubles or viscosity build-up before recombination.

Hutcheson

CODE 2

5-17-78 Disclosure received.

Close art in US 720830 to Marsden who heats tobacco extract to 250 degrees C or higher.

7-17-79 Art sent to inventor--examples requested.

8-23-79 Asked inventor to organize presently available data and examples for evaluation.

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0000049574

835 IMPROVED FLAVOR FOR RECONSTITUTED TOBACCO

D. Keel/R&D/Flavor Development Division/Daylor/Gannon

In the manufacture of reconstituted tobacco by the paper-made process, in which the solubles are concentrated and returned to the sheet, it was found that the addition of ammonia to the solubles either with or without heat and/or with or without other additives before recombination with the sheet resulted in an improved flavor of the product making it more tobacco-like.

Related to 834.

Hutcheson

CODE 2

5-17-77 Disclosure received.
11-7-77 Search requested.
11-22-77 Search completed.
7-17-79 Art sent to inventor--examples requested.
8-23-79 Asked inventor to organize presently available data and examples for evaluation.

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836 BONDING OF POLYPROPYLENE WRAP TO ITSELF BY LASER IRRADIATION

W. Farone, A. Lilly, Jr., P. Martin, and W. Claflin/R&D/Applied Research/Physical Research Division/Kassman/Lowitz/Farone

Techniques for bonding two sheets together at high speed using focussed (2 focal length) CO₂ laser beam. Bonded area around 0.008 diameter. with reflecting foil beneath the wraps speed for bonding was 590 feet/minute with 40-60 watts power.

Sarofeen

CODE 1

5-23-78 Disclosure received.
7-12-78 Search requested from outside firm.
7-28-78 Search received--sent to Farone for evaluation.
Final disclosure details expected following testing.
11-1-78 Meeting with Farone et al--special laser has to be ordered.
8-79 Testing now in progress.

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0000049575

839 IMPROVEMENTS RELATED TO SMOKING ARTICLES

C. Kounnas/R&D/Flavor Development Division/Daylor/Gannon

Cooling compounds added to rod paper for even delivery thereof.

disclosure and concept of an improved cigarette with a cooling compound added to the rod paper.

Hutcheson

CODE 3: better coordination with the sheet and the rod paper.

6-13-78 Disclosure received.

5-14-79 Extensive patent search underway.

5-79 Analytical and subjective material received.

6-1-79 Report to inventor.

7-79 Disclosure discussed in general with H. Kothe--no decision reached at this time.

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840 METHOD FOR REDUCING CO DELIVERY IN NONFILTERED CIGARETTES

R. Ikeda/R&D/Flavor Development Division/Daylor/Gannon

Cigarettes are made with a fluted plastic filter on which the CA section is blocked so that smoke must pass in the flutes next to the cigarette paper allowing better possible diffusion of CO out of the cigarette paper. Reduction of 15% CO delivery was observed when compared with regular commander cigarette in which 45 mm of tobacco were smoked in both cigarettes. May also be applied to filtered cigarettes.

Sarofeen

CODE 4

6-23-78 Disclosure received.

Awaiting tests by inventor to develop method.

Close art.

New disclosure to be submitted by Ikeda and Houck.

8-30-79 Talked with Houck--project still alive but the way to go with the construction is still being determined.

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0000049576

844 PROCESS FOR CHEMICALLY PULPING TOBACCO MATERIALS FOR SHEET MAKING

A. Keller and G. Bokelman/R&D/Tobacco Materials Development Division/Burns/Gannon

Burley stems are extracted with water, then subjected to a short period of reflux in about 25% aqueous potassium hydroxide solution. The stems are next washed and subsequently treated with steam at about 115 psi and 167 degrees C for a few minutes. The stems may then be adequately defibrillated merely by gentle stirring; i.e., without any mechanical refining. Long, thin fibers, which cannot be made by mechanical refining are produced by this invention.

Hutcheson

8-1-78 Disclosure received.

8-11-78 Preliminary search results sent to inventors.

3-79 Comparative studies underway.

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847 METHOD FOR APPLYING POWDERS TO TOBACCO

W. Nichols/R&D/New Cigarette Products Division/Meyer/Gannon

Method for applying powdery materials to tobacco during making. directs an airstream conveying powdery material to a point of application that will produce a minimum loss of material.

Palmer/Not assigned

CODE 2

9-14-79 Disclosure received.

1-79 Needs to be discussed with inventor.

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849 POLYMERS FOR IMPROVING FLAVOR AND AROMA OF SMOKE

H. Grubbs, T. Van Auken, and W. Johnson, Jr./R&D/Chemical Research Division/Johnson/Osdene/Physical Research Division/Kassman/Lowitz/Farone

Polymers of unsaturated aliphatic, aromatic carbonates can be prepared in ways similar to the preparations of unsaturated aliphatic, aliphatic carbonates as disclosed in 687. These polymers, when added to cigarette filler, on smoking liberate phenolics to the smoke stream, which improve the flavor and aroma of the smoke.

Spin-off of 687.

Hutcheson

9-29-78 Disclosure received.

11-6-78 Examples being prepared; synthetic process under development.

9-4-79 Subjective smoking results to be generated to complete project.

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850 POLYMERS OF NICOTINE AND NICOTINE ANALOGUES

W. Johnson, Jr./R&D/Chemical Research Division/Johnson/Osdene

Polymers of nicotine analogues and of nicotine itself, which possess carbonate or ester linkages, are to be prepared from suitable substituted nicotines via condensation reactions. The polymers would consist of nicotine moieties, moieties of substituted nicotines joined by ester linkages or of nicotinic esters that have been condensed with appropriate diols, which may or may not be nicotinic in character but which in combustion and/or pyrolysis will yield nicotine and products that do not adversely affect cigarette smoke.

Hutcheson

9-29-78 Disclosure received.

11-6-78 Search completed--to inventor for review.

Awaiting more definitive information and examples.

9-4-79 Project in preliminary stage.

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851 SOLANESOL ANALOGUES AND ESTERS THEREOF FOR APPLICATION TO CIGARETTE FILLER

W. Johnson, Jr., H. Grubbs, and G. Chan/R&D/Chemical Research Division/Johnson/Osdene

Solanesol analogues and esters thereof are to be applied to cigarette filler and smoked. Improved subjective response should result. The efficacy should optimize in those cigarettes whose tar deliveries are low, i.e., below 9-10 mg when smoked by standard machine methods.

Hutcheson

9-29-78 Disclosure received.

3-79 Methods for preparing compounds being developed.

9-4-79 Project in preliminary stage.

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856 ELECTRON BOMBARDMENT FOR CONTROLLING BEETLE INFESTATION

R. de la Burde/R&D/Tobacco Materials Development Division/Burns/Gannon

Related to earlier Laszlo case.

Palmer

CODE 4

10-18-78 Disclosure received.

10-20-78 Awaiting further data.

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857 LASER OPTICAL SYSTEM

E. Grollmund/Manufacturing Engineering/Pasquine

A precision lens centering and focusing structure which comprises novel features for providing precise control and stability for a laser optical system.

Sarofeen

CODE 2

11-27-78 Disclosure received.

3-79 Search to be done when indicated.

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858 DISK IN FILTER TO INCREASE RESPONSE OF A LOW DELIVERY CIGARETTE

R. Hale/R&D/Flavor Development Division/Meyer/Gannon

A round disk is sealed in the center of the filter plug at the mouth end. For example, a seal is made with acetone, heat, heat and triacetin or c.a. disk glued to the exit end of the filter, or any other method of sealing the center portion of the filter plug. The seal can be at the end or through the entire filter plug. Object is to increase the response of a low delivery cigarette and to give more mouth feel, fullness and impact to the smoker.

Related to 842.

Sarofeen

CODE 2

12-1-78 Disclosure received.

5-9-79 Inventor: wait for maker to give more definitive results.

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860 NOVEL FILTER FOR DELIVERY OF MAXIMUM FLAVOR

D. Keel and W. Bell/R&D/Flavor Development Division/Daylor/Gannon

Filter that contains a tube(s), or components that fit together to form a tube(s), in a matrix of filter tow or a solid (or foam) rod by which a portion of raw, unfiltered smoke can be delivered to the mouth of the smoker with a volume of air dilutin provided by means of perforation or porosity of the tipping paper with or without flutes, bumps, or other known means.

Inskeep

CODE 2

12-1-78 Disclosure received.

5-7-79 Have only subjective data, expect analytical results soon.

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0000049579

865 REDUCED DELIVERY SMOKING PRODUCT

B. Semp and D. Teng/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Microbial treatment of a tobacco extract followed by recombination with the fibrous portion of the tobacco produces a cigarette material having HCN and CO. Additionally the TPM of the treated versus untreated also show reductions.

Related to 810 and 838.

Hutcheson

CODE 1

12-21-78 Disclosure received.

6-29-79 Disclosure sent to WLKT for evaluation in view of prior filings of 810 and 838.

7-17-79 Letter to WLKT re how to proceed.

9-5-79 Development work in the pilot plant may result in additional filings in this area--no definitive data at this time.

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866 GREEN TOBACCO LEAVES ARTIFICIALLY CURED BY ACID INCUBATION

D. Gooden and G. Bokelman/R&D/Tobacco Materials Development Division/Burns/Gannon

A process whereby green tobacco leaves are artificially cured by acid incubation. Advantages: (1) the acid incubation process gives a method to yellow pressed green tobacco from which fluids have been expressed. The yellowing removes the objectionable green color and green smoke taste or odor associated with green tobacco; and (2) acid incubation will provide leaf material with form and color similar to conventional flue-cured and burley tobacco but will not require stemming or reconstitution.

Hutcheson

CODE 2 OR 4

1-15-79 Disclosure received.

3-79 Completion report being prepared by inventors.

8-23-79 Inventors indicate completion report almost finished.

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869 LASER SCANNING DEVICE FOR MEASUREMENT OF TOBACCO PARTICLE LENGTHS AND LENGTH DISTRIBUTION

H. Wakeham/R&D/Miscellaneous

Palmer

1-23-79 Disclosure received.

2-2-79 Comments to inventor.

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0000049560

873 MICROPROCESSOR-CONTROLLED AUTOMATED GAS INJECTION SYSTEM FOR THE ANALYSIS OF GAS PHASE CIGARETTE SMOKE USING GLASS CAPILLARY COLUMNS

M. Parrish, D. Douglas, C. Higgins, D. Watson/R&D/Analytical Division/Will/Osdene

System for automatic preconcentration of very volatile gas samples for gas chromatograph.

Inskeep

INACTIVE 2-6-79

Disclosure received.

Has been submitted for publication.

5-11-79 Discussed by F. Will, D. Watson, and M. Parrish with Inskeep; search requested from outside firm.

6-1-79 Search received--sent to inventors for comments.

7-20-79 Memo to Osdene: disposition?

8-21-79 Inactivated in favor of publishing.

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874 CO REDUCTION BY CIGARETTE ROD DESIGN

R. Jenkins/R&D/Chemical Research Division/Johnson/Osdene

Cigarettes having a central core placed along the axis of the rod have been prepared, and on smoking the delivery of CO is substantially reduced. The central core may be composed of extruded tobacco, pith wood, carbon and the like. The core preferably is nonporous on the long axis and has some porosity radially.

Related to 622.

Hutcheson/WLKT/Kothe

2-9-79 Disclosure received.

8-13-79 Disclosure sent to Kothe to determine whether an application should be prepared.

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875 RECONSTITUTED TOBACCO SHEET

R. Uhl and G. Gellatly/R&D/Tobacco Materials Development Division/Burns/Gannon

A process for producing a reconstituted tobacco sheet by wet forming on a paper making device except that a high bulk sheet is obtained by eliminating sheet compression due to mechanical pressing to remove water and by eliminating sheet ironing due to drying on a heated cylinder.

Inskeep

CODE 2

2-14-79 Disclosure received.

8-9-79 Identical disclosure 889 combined herewith.

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0000049581

876 HIGH BULK TOBACCO SHEET

R. Uhl and G. Gellatly/R&D/Tobacco Materials Development Division/Burns/Gannon

Production of a high bulk tobacco sheet by dry-forming means. Dry in this context is relative and can be considered to mean a considerably lower moisture than is normally present in a sheet exiting a paper making forming device.

Inskeep

CODE 2

2-15-79 Disclosure received.

7-23-79 Search performed in our files. Inventors wish to reduce to practice before continuing.

8-9-79 Identical disclosure 890 combined herewith.

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878 PREPARATION OF OPTICALLY PURE NICOTINE ANALOGS

W. Edwards III/R&D/Chemical Research Division/Johnson/Osdene

Palmer

INACTIVE 3-9-79 Disclosure received.

Inactivated based on decision regarding inventorship.

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879 PRODUCTION AND USE OF REACTION FLAVORS FROM YEAST HYDROLYSATE AND SUGARS

B. Semp, L. Wu, and J. Swain/R&D/Flavor Development Division/Gannon/Daylor/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Reaction flavors for smoking products are disclosed. The flavors are prepared by reacting reducing sugars and selected hydrolysates of single-cell protein optionally in the presence of an aldehyde in an essentially solvent-free system. The thus prepared flavors may be incorporated into smoking compositions including tobacco, reconstituted tobacco, non-tobacco substitutes or mixtures thereof.

Hutcheson

CODE 2

3-20-79 Disclosure received.

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0000049582

880 USE OF B-DIKETONES TO FORM DIHYDROPYRIDINES AND PYRIDINES

F. DeBardeleben/R&D/Chemical Research Division/Johnson/Osdene

Pyridines and dihydropyridines are synthesized from B-diketones. For example, reaction of acetylacetone with ethyl B-amino crotonate would generate 2,4,6-triethyl nicotinic acid and 2,4,6-trimethyl nicotines.

Hutcheson

3-23-79 Disclosure received.

9-20-79 Search by TPI requested.

SEARCH REQUESTED BY TPI ON 9-20-79

COMPLETED

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NO DISCLOSURE OF INFORMATION

881 USE OF DDO(2,3-DICHLORO-5,6-DICYANO-L,4-BENZOQUINONE) TO CONVERT DIHYDROPYRIDINES INTO PYRIDINES

F. DeBardeleben/R&D/Chemical Research Division/Johnson/Osdene

Hutcheson

INACTIVE 3-23-79 Disclosure received.

7-31-79 Inactivated on the basis of preliminary search in which pertinent art was found.

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882 USE OF TRANS 2-PENTENAL TO GENERATE THE PYRIDINE RING

F. DeBardeleben/R&D/Chemical Research Division/Johnson/Osdene

Synthetic routes for preparing nicotine analogues are disclosed wherein the pyridine ring is generated by reacting trans 2-pentenal with, for example, 3-amino crotonate. Various 2,4-dialkyl-nicotines may be prepared.

Hutcheson

3-23-79 Disclosure received.

9-20-79 Search by TPI requested.

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0000049583

884 CURING GREEN TOBACCO LEAVES BY TREATING WITH SULFUR DIOXIDE

D. Gooden, G. Bokelman, and G. Keritsis/R&D/Tobacco Materials Development Division/Burns/Gannon

The process simply involves the exposure of tobacco material to sulfur dioxide gas in a closed chamber or vessel. After exposure to sulfur dioxide, unpressed green mature tobacco leaf required approximately 15 minutes to become light brown, while pressed (but dry) green tobacco material reached a comparable color in approximately 45 minutes. The color obtained is an acceptable flue-cured or burley color.

WLKT/Kothe/Inskeep

CODE 2

4-4-79 Disclosure received.

6-20-79 Asked Bokelman for analytical or subjective results.

6-28-79 Note from Bokelman re additional work.

6-79 Search performed in our files--intend to proceed with draft.

9-27-79 Disclosure sent to WLKT.

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885 APPLICATION OF TOBACCO ADDITIVES TO CIGARETTE WRAPPERS

J. Seeman and H. Spielberg/R&D/Chemical Research Division/Johnson/Osdene

The proposal is to incorporate the additive to the cigarette paper, either by passing the paper through a solution of the additive(s) in a easily removable solvent or by incorporating the additive to the paper matrix during the paper manufacture.

Hutcheson

4-4-79 Disclosure received.

3-79 Preliminary search completed.

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886 CURING GREEN TOBACCO LEAVES BY PHOTBLEACHING

D. Gooden and G. Bokelman/R&D/Tobacco Materials Development Division/Burns/Gannon

After preincubation with either steam, acetone vapors or N octyl alcohol vapors, photobleaching occurs very effectively in sunlight and has been performed with both incandescent and ultraviolet light. When photobleached, all color pigments are removed and the tobacco material becomes completely white.

WLKT/Kothe/Inskeep

CODE 2

4-4-79 Disclosure received.

6-20-79 Asked Bokelman for analytical or subjective results.

6-28-79 Note from Bokelman re additional work.

6-79 Search performed in our files.

9-27-79 Disclosure sent to WLKT.

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887 IMPROVEMENT OF ES PROCESS

W. Farone and D. Teng/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Inskeep

INACTIVE 5-11-79 Combined with 819.

888 DEVICE FOR THE MODIFICATION OF THE RATE OF DELIVERY OF TOBACCO SMOKE COMPONENTS

G. Forrest and G. Vilcins/R&D/Analytical Division/Will/Osdene

Device for the modification of the rate of delivery of tobacco smoke components based on the transient retention of the component by the device. Retention must be on the order of the time between puffs.

Palmer

4-24-79 Disclosure received.

889 PROCESS FOR PRODUCING A RECONSTITUTED TOBACCO SHEET

R. Uhl and G. Gellatly/R&D/Tobacco Materials Development Division/Burns/Gannon

Production of high bulk sheet to (1) reduce the amount of tobacco used to provide a cigarette firmness (2) reduce deliveries by reducing the amount of tobacco used (3) possible reduction of CO delivery due to higher surface area and porosity.

Inskeep

INACTIVE 4-27-79 Disclosure received.

8-9-79 Combined with 875 (disclosures identical).

890 PRODUCTION OF HIGH BULK TOBACCO SHEET BY DRY-FORMING MEANS

R. Uhl and G. Gellatly/R&D/Tobacco Materials Development Division/Burns/Gannon

Fourdriner wire for sheet formation put dry shreds sifted on and compacted by suction and rolls. Very little water to be removed.

Inskeep

INACTIVE 4-27-79 Disclosure received.

8-9-79 Combined with 876 (disclosures identical).

0000049585

891 QUANTITATIVE COLLECTION SYSTEM FOR SIDESTREAM CIGARETTE SMOKE

W. Morgan and J. Nienow/R&D/Analytical Division/Will/Osdene

A quantitative collection system for collecting sidestream smoke which consists of a chimney style hood. The cigarette is mounted through a hole in the bottom side wall of the hood. Separate air supplies are provided and negative pressure is maintained at the top of the chimney. A shroud of reduced diameter surrounds the coal. The arrangement eliminates smoke condensation and guarantees that all smoke engendered will proceed to a smoke trap.

Sarofeen

5-2-79 Disclosure received.

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BASED ON THE TRANSIENT RETENTION OF THE CONDENSED SMOKE IN THE SMOKE TRAP

0000049586

892 LASER DISCLOSURES

S. Spiers, W. Smick, D. Brookman, E. Grollimund/Manufacturing Engineering/Pasquine

A compilation of ideas from several cooperating individuals which, in composite, result in a bobbin feed and driving method which makes high perforating speeds possible on a laser perforating machine. The ideas in this file will be separated into individual cases or be combined or joined in other disclosures for bobbin drives.

also known as Malucene's Laser Perforating Machine
Sarofeen

CODE 2

5-2-79 Disclosures received.

8-23-79 This group of disclosures was filed under the generic number PM 892 and had for a purpose to make an interim record of improvements in Malucene paper perforating accessory equipment prior to possible viewing during a visit by a Malucene technologist. Only enough of a description is included to establish a priority of conception, and this generic PM number 892 will be later phased out as separate disclosures are made of the several items included in this folder. These disclosures were passed on to WLK&T in due course in the abbreviated form in which written and a meeting was scheduled for George Brandt to visit and inspect these disclosures and the installation comprising the inventions. After completion of the visit by Malucene's technologist which took place during the period of from afternoon of May 7 and left afternoon of May 11, 1979, George Brandt after preliminary discussions with Art Palmer and Howard Kothe, visited on August 8 and 9 and inspected the installations and talked with the inventors involved. His evaluation resulted in a highlighting of those features which in his opinion might be patentable. He plans to write up one or more cases around these disclosures. In the meantime more detailed disclosure letters have been received describing further some of the more substantial features previously outlined in the above disclosures. Now, referring to the cover sheet in this folder listing disclosures 1 through 11, the status is as follows: (1) Grollimund - large windup drum and paper path change: this is now incorporated in PM 900 and 911; (2) This listed item is not found in the group of sheets in this folder, but has already been filed upon in the name of Ed Stultz as inventor in a separate case; (3) Not acted on as yet; (4) Not acted on as yet; (5) Not acted on as yet; (6) Ev Grollimund is modifying and expanding the technique of alignment talked about herein and may submit another disclosure; (7) Not acted on as yet; (8) Not acted on as yet; (9) Not acted on as yet; (10) Not acted on as yet; and (11) Not acted on as yet. I expect to confer with George Brandt to get his judgement on how the cases marked "not yet acted on" above should be categorized.

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0000049587

894 USE OF PIPERAZINES AS FLAVORANTS AND/OR COOLING COMPOUNDS

W. Edwards and Y. Houminer/R&D/Chemical Research Division/Johnson/Osdene

Tobacco flavorant and/or cooling compounds selected from 1,4-disubstituted pyrazines and alkylpiperazines wherein the 1,4-substituents are acyl, sulfonyl and carbamido are disclosed.

Hutcheson

5-7-79 Disclosure received.

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895 1,2- AND 1,4-DIHYDROPYRAZINES (I, II) AS FLAVORANTS AND/OR COOLING COMPOUNDS

W. Edwards and Y. Houminer/R&D/Chemical Research Division/Johnson/Osdene

Tobacco flavorant and/or cooling compounds selected from 1-substituted-1,2-dihydropyrazines and 1,4-disubstituted dihydropyrazines wherein the 1- and 4-substituents are acyl, sulfonyl and carbamido.

Hutcheson

5-7-79 Disclosure received.

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896 FLAVOR-RELEASE AGENTS ON TOBACCO

W. Johnson, Jr. and H. Grubbs/R&D/Chemical Research Division/Johnson/Osdene

Polymeric sulfur release flavorant compounds are disclosed as being useful in smoking products. Processes for their preparation and use on tobacco are detailed.

Hutcheson

5-8-79 Disclosure received.

9-5-79 Preliminary synthesis work underway.

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0000049588

897 SYNTHESIZING PYROLYTIC PRECURSORS TO PRODUCE ALDEHYDIC-TYPE FLAVORANTS

M. Bourlas and H. Grubbs/R&D/Chemical Research Division/Osdene/Johnson/Analytical Division/Osdene/Will

Polymeric flavorants release compounds having controlled thermal decomposition properties producing aldehydic-type flavorants on combustion are disclosed. Prior to smoking, the compounds are non-volatile and non-migratory.

Hutcheson

5-7-79 Disclosure received--lacks detail.

9-4-79 Preliminary synthesis of monomers underway.

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898 COMPOUNDS CONTAINING THE BASIC ELEMENTS OF THE NICOTINE MOLECULE

W. Edwards and J. DeBardeleben/R&D/Chemical Research Division/Johnson/Osdene

Nicotine analog with fixed geometry through attachment of the N-methyl to the 2-position of the pyridine ring. Alkylated or arylated equivalents.

Inskeep

5-10-79 Disclosure received.

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899 8-METHYL-6,7-PYRIDO4'3-B5-8-AZABICYCLO4.3.2.1OCTANE AND ALKYL-SUBSTITUTED ANALOGUES

J. Seeman and C. Chavdarian/R&D/Chemical Research Division/Johnson/Osdene

Nicotine analog with fixed geometry through methylene bridging from 5' to 2. Alkylated homologs.

Related to 893.

Inskeep

5-15-79 Disclosure received

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0000049589

900 ALTERNATE PATH BOBBIN LOAD SYSTEM

E. Grollimund/Manufacturing Engineering/Pasquine

A method of mounting dual bobbins of paper adaptable to be fed for perforation through a perforator allowing for reduction or elimination of down time for threading bobbins so that perforating process may become more nearly a continuous process.

Related to 911 bobbins are non-revolving.

Sarofeen

CODE 2

INACTIVE 5-11-79 Disclosure received.
9-19-79 Combined with PM 911.

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902 MEASURING PRESSURE DROP

D. Brookman/Manufacturing Engineering/Pasquine

A strip of cigarette tipping paper after being perforated is guided over a pressurized port of prescribed area. A positive air pressure is maintained at said port to be available to bleed through the holes in the tipping paper. The pressure drop is measured across the paper to determine the degree of porosity attained.

Related to earlier Stultz case.

Sarofeen

CODE 2

5-17-79 Disclosure received.
9-19-79 This case is similar to Ed Stultz' case, now pending, which differs only in the use of positive air pressure as against Stultz' use of negative air pressure. This case is being held in abeyance pending first Office Action on the Stultz case.

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903 USE OF TOBACCO DUST IN AN RL-TYPE SHEET MAKING PROCESS

D. Lowitz/R&D/Applied Research/Lowitz/Farone

Tobacco dust too fine for RL process is extruded as fibers, coagulated; these then go into RL slurry for sheet making.

Inskeep

CODE 2

5-18-79 Disclosure received.
9-20-79 PM data base search completed.

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904 UTILIZATION OF WASTE TOW PAPER

D. Teng and B. Semp/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Waste cigarette filter (cellulose acetate) is deesterified to cellulose. The deesterified material as well as cigarette paper from ripper shorts can be converted into sugar syrup by treating the materials with cellulases (such as *Trichoderma viride* cellulases) and cellobiase. This sugar syrup can be used in tobacco casing, carbon source for denitrification or can be used for reaction flavor.

Hutcheson

CODE 2

6-8-79 Disclosure received.

8-10-79 Preliminary search completed by TIF.

8-20-79 Discussed with T. Gillis of WLKT--formal disclosure to be sent to WLKT for application preparation.

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905 REORDERING OF DIET

C. Hoelzel/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

A method of reordering expanded tobacco wherein fully reordered tobacco is mixed with freshly expanded tobacco prior to entering the reordering cylinder. From the reordering cylinder the mixture is sent to a bulking silo (first in-first out type) from which a portion is removed at the exit for use in the "fully reordered" tobacco mentioned above.

Inskeep

CODE 1

3-21-79 Disclosure received.

6-79 Preliminary search completed--sent to inventor for review.

6-22-79 Inventor's comments received.

7-2-79 Discussed with Farone--awaiting test results.

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909 QUALITY CONTROL METHOD

R. Creamer/Chemical Research Division/Johnson/Osdene

Light absorption, rather than more usual scattering, is applied to smoke aerosol to study variations within a puff or from puff to puff.

Inskeep

7-22-79 Disclosure received.

7-23-79 Sent to Osdene/Johnson for recommendations/comments.

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910 COOLING VACUUM PUMPS BY AIR FLOW

E. Grollmund/Manufacturing Engineering/Pasquine

A system for maintaining laser vacuum pump temperature levels within safe operating limits to allow for elimination of down-time due to pump overheating. Also increases pump life and contributes to more even power output from laser.

Sarofeen can be used for reproduction.
8-6-79 Disclosure received.

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911 DUAL PATH SYSTEM TO ELIMINATE BOBBIN CHANGE OVER TIME

E. Grollmund/Manufacturing Engineering/Pasquine

A dual path bobbin mount system for use on laser perforators to eliminate down time for bobbin loading. An optical system is provided which allows for shifting the perforating action from strip A to strip B simply by shifting the position of beam splitter mounted on a track.

Sarofeen

8-1-79 Disclosure received.

9-79 PM 900 combined herewith.

9-19-79 Search requested from outside firm.

9-27-79 Search received.

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912 COMPOUND CONTAINING BASIC NICOTINE ELEMENTS

W. Edwards and J. DeBardeleben/R&D/Chemical Research Division/Johnson/Osdene

Nicotine analog with fixed geometry through C_1 - C_3 alkylene bridging from 2' to 2 or 4. Alkylated or arylated equivalents.

Related to 898.

Inskeep

7-31-79 Disclosure received--inventors notified.

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0000049592

913 NINO

Schulthess and Krasna/FTR

A continuous process for microbial denitration of tobacco materials is disclosed. Aerobic fermentation using selected yeasts results in a tobacco product having substantially reduced NO on smoking.

Hutcheson

8-13-79 Disclosure received.

8-79 Copy of application as filed in Luxembourg received.

9-5-79 Copy of application given to S. Tehnet to translate.

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914 IMPROVED APPARATUS FOR THE MANUFACTURE OF FIBROUS ARTICLES

A. Gergely/R&D/New Cigarette Products Division/Meyer/Gannon

This invention is an improvement to the Filtrona NWA process.

Sarofeen

8-14-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Sarofeen.

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915 MEANS FOR REDUCING SPHERICAL ABERRATION IN A LENS

D. Lowitz/R&D/Applied Research/Farone

When using a lens to focus a laser beam, a second or additional element may be provided that is essentially a lens element in its basic construction, but which does not have any center portion. Because lens elements of a finite size and thickness normally introduce spherical aberration, such an additional element that does not have a center region of material can be used together with the primary lens element to modify the effective focal length of the outer portion of the primary lens and to make it equal to the center portion of the primary lens, and thereby eliminate spherical aberration and permit focusing to a spot.

Sarofeen

8-27-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Sarofeen.

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0000049593

916 CIGARETTE FILTER

J. Lephardt/R&D/Analytical Division/Will/Osdene

A ventilated filter with tow compressed toward axis at the zone of ventilation to disperse smoke better across the filter.

Inskip

8-28-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Inskip.

9-20-79 PM data base search completed.

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917 CIGARETTE FILTER

J. Lephardt/R&D/Analytical Division/Will/Osdene

A ventilated plug-space-plug filter wherein the space contains a conical baffle and is positioned at the ventilation zone. Air-smoke mixing is favored.

Inskip

8-28-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Inskip.

9-20-79 PM data base search completed.

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918 INERTIAL FRICTION DRIVE CONVEYOR CHAIN SYSTEM

M. Slovic/Stemmery

A system for conveying palletted or flat sided materials such as load containing boxes. The basic component is a roller or slide chain comprising a top mounted roller in an upwardly projecting lug. The chain is driven preferably in a channel guide. The load bearing upwardly projective lugs receive the load on a lug mounted roller. the weight of the load pressing against the upper rollers causes it to move with the chain supported on the rollers. An impediment to the movement of the load such as a stop at the end of desired travel causes the chain to underide the stopped portion of the load while continuing to advance other portions of load along the chain lengths.

Sarofeen

8-29-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Sarofeen.

9-12-79 Search requested from outside firm.

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0000049594

919 CIGARETTE CONSTRUCTION

H. Merritt/R&D/Miscellaneous

Palmer

9-6-79 Disclosure received--evaluation of U.S. 3,924,643 by WLKT requested.

9-20-79 Above evaluation discontinued.

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0000049595

0000049596

SEP 28 1979
T. S. OSBENE